Data Capture Logic

Local Application

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The CAPT local application can be used to assist in data capturing based upon a set of conditions that are indicated by Bit states. An “armed” Bit is turned off after a delay following detection of any trip condition. The armed Bit can be used to condition data capture via Data Access Table entries. The local applications parameters list for CAPT is as follows:

```
E LOC APPL PARAMS 05/26/93 1329
NODE<0576>  NTRY<10>
NAME=CAPT   CNTR=0193
TITL"CAPTURE DATA WITH DELAY "
SVAR=0004A73E
ENABLE  B<00BA> CAPT ENABLE
ARMED   B<00BB> CAPT ARMED
DELAY   C<0005> CAPDL       CY
COND1   B<80BC> CAPT COND1
COND2   B<00BD> CAPT COND2
COND3   B<0000>
         <0000>
         <0000>
         <0000>
         <0000>
```

The enable Bit# is followed by the armed Bit#. When this bit is “1”, it is considered the “armed” state. Data collection via Data Access Table entries can be conditioned to execute when this bit is set. The delay Chan# reading specifies the number of 15 Hz cycles following the detection of a trip condition during which the armed Bit should remain set. The condition enable Bit#s are watched by the application to detect the occurrance of a trip condition. Any of the conditions is enough to be called a trip. The state of each Bit is indicated by the sign bit of the word. The remaining 15 bits specify the Bit# itself. In the example shown, when Bit# `00BC` is a “1”, or when Bit# `00BD` is a “0”, a trip condition has occurred. A word of `0000` means a “don’t care”. Thus, zero should not be used for a trip condition Bit#.

When CAPT is first enabled, it turns on the armed Bit. When CAPT is disabled, it turns off the armed Bit. When a trip is detected while in the armed state, the delay counter is set to count down. During the countdown, any further trips are ignored.

The initial program version is 220 lines of Pascal, generating about $300 bytes of code. The maximum number of condition Bit#s can easily be increased (up to 7).